

REMARKS

Reconsideration of the application is urged in view of the amendments to the claims as set forth above, new claims, and comments which follow.

Claim amendments

Claim 23 has been cancelled as it claimed same subject matter of claim 16.

Independent claims 42 and 44 are amended by introducing the feature of "a second sealing ring located between the outer diameter of the first tubular section and the inner diameter of the second tubular section in a sliding overlapping contact area of the first and second tubular sections" into the claims. This feature finds support in the application as filed, page 4, last line to page 5, line13.

New claims 46 to 80 are added.

Novelty and non obviousness

Claim 45, claim 70, claim 72 and claims dependent on claims 45, 70 and 72.

Regarding rejections made under 35 USC §102, according to MPEP 2131, "*A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.*" *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

It is respectfully brought to the Examiner's attention that DE3809062A1 does not disclose all features of claim 45, claim 70 or claim 72.

First, DE3809062A1 does not disclose the first tubular section being a spindle, nor does it disclose the second tubular section being a target, neither expressly nor inherently.

Hence claims 45 and 70, and by virtue of their dependency, all claims dependent on claim 45 or claim 70 are not anticipated DE3809062A1.

Next, DE3809062A1 does not disclose a vacuum sputter reactor comprising a spindle and a cylindrical target, neither expressly nor inherently.

Hence claim 72, and by virtue of their dependency, all claims dependent on claim 72 are not anticipated by DE3809062A1.

Claim 45, 70 and 72 are also not obvious in view of the prior art. As set out in MPEP 2143, *In re Vaeck*, 947 F.2d488 20 USPQ2d 1438 (Fed. Cir. 1991), the suggestion of the features, the reasonable expectation of success and all claim limitations are to follow from the prior art, and not from the disclosure of the application itself, in order to make out a case of prima facie obviousness.

DE3809062A1 is silent on the use of its coupling in vacuum sputtering apparatuses and applications. The reference is related to pipes, especially for use in mining industry, and relates to a technical problem of rotation of two coupled pipes, one relative to the other, in axial direction, which is not an issue of the present invention. It is clear there is no hint of vacuum sputtering applications, nor is there any reason to believe that the use of the teaching of DE3809062A1 would provide any success for coupling a target and a spindle in such vacuum sputtering apparatuses, which expectation of success must be derivable from DE3809062A1.

Therefore, because DE3809062A1 nor any other prior art references makes any suggestion regarding coupling sputter targets and spindles, or using the prior art

coupling in vacuum sputter reactors, the subject matter of claims 45, 70 and 72, and by virtue of their dependency the claims dependent on claims 45, 70 or 72, would not have been obvious in view of the prior art.

Claims 42, 44, 68 and 69, and dependent claims.

Amended claims 42 and 44 now also claim the presence of a second sealing ring located in the area of overlap between the inner tubular wall and the outer tubular wall. New claims 68 and 69 claim similar subject matter as claims 42, respectively 44, however the flange extremity is not necessarily a separate ring. New claims 68 and 69 claim additionally the presence of a second sealing ring located in the area of overlap between the inner tubular wall and the outer tubular wall.

In the present office action, referring to former claim 19 which claims this feature in its dependency to claim 45, the Examiner points to *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960), indicating that “duplicating the components of a prior art device is a design consideration within the skill of the art”.

It is respectfully brought to the Examiner’s attention that, as set out in MPEP 2144.04 – VI.B, in the cited case of *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960), “the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced” (emphasis added).

In the present application, the presence of a second sealing ring does have a new and unexpected result.

As set out in the application as filed, page 5, line 7 to 13, the arrangement of two sealing rings provides an automatic and uniform pressure on the seal. The latter has as a result that couplings, comprising at least two sealing rings as claimed, can be disassembled and assembled repetitively, maintaining their mechanical properties,

as the arrangement minimizes risk of damaging the sealing rings or sealing surfaces during assembly.

Based on the relevant prior art as presently cited, such result is new and there is no reason to believe a skilled person would expect this result. No reference hints to such problem, nor is there any reference suggesting that the use of two rings would provide an automatic and uniform pressure on the seal, having the advantage as set out in the present application.

Hence, taking MPEP 2144.04 – VI.B, citing *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) into account, the presence of a second sealing ring must be considered as having patentable significance.

As noted above, according to MPEP 2143, *In re Vaeck*, 947 F.2d 488 20 USPQ2d 1438 (Fed. Cir. 1991), the suggestion of the features, the reasonable expectation of success and all claim limitations are to follow from the prior art, and not from the disclosure of the application itself, in order to make out a case of prima facie obviousness.

As already explained, the provision of a second sealing ring was not obvious, because none of the prior art references suggest provision of a second sealing ring located in the area of overlap between the inner tubular wall and the outer tubular wall, nor does the prior art provide a reasonable expectation of success of such provision.

For at least this reason, claim 42, claim 44, all claims dependent thereon, and claim 68 and claim 69 are to be considered new and non obvious in view of the prior art.

Conclusion

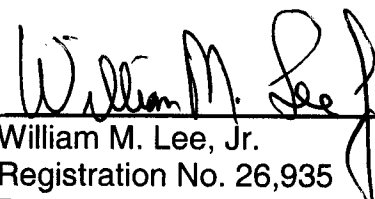
The applicants respectfully request consideration and allowance of the application based on the amended claims as set forth above.

As this response is being filed during the fourth month following the Examiner's Office Action, an appropriate Petition for Extension of Time is submitted herewith, and the extension fee and excess claims fees have also been tendered herewith.

Further action is therefore awaited.

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Respectfully submitted,



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